Genes, the Environment, and Me: A Health and STEM Network (GEMNet) is developing an integrated curriculum based on type 2 diabetes (t2d) taught across disciplines in high school biology, health, and Family and Consumer Sciences (FACS) classes. We will integrate diabetes education into ethnically and racially diverse high school science and health curricula, thereby increasing opportunities for underrepresented minorities to engage in biomedical education and strengthening relationships with teachers from these communities.

**Total Prevalence of Diagnosed Diabetes, in Adults, Age-Adjusted Percentage**

- **1996**
- **2006**
- **2016**

**THE WHAT**

**Curriculum Design & Development**

Two complementary units for **HEALTH and BIOLOGY** with a shared set of **ENDURING UNDERSTANDINGS**

- Environmental Influences
- Complementary Curricula
- Type 2 Diabetes
- Disease Prevention
- Glucose Balance
- Homeostasis

**THE HOW**

**Teacher PD and Study Recruitment**

**Study Design**

Measuring the learning gains for students who are exposed to the health unit, the biology unit, and both units.

**Teacher Recruitment for PD and Study**

- Successful strategies: Networking with teachers from prior GEM study; recruiting new teachers from teacher conferences (e.g., NSTA, NABT).
- **Challenge**: Design relies on enrolling teams of teachers from the same school for PD – only have 2 teams as yet.

**WHAT’S NEXT?**

**Continued Curriculum Development and Dissemination**

**Future Directions in Years 3, 4, and 5**

- **Framework**
  - Designing the GEMNet t2d curricula to integrate with Social Justice education
- **Food Sciences Topics**
  - The science of taste; food preference and availability; using yeast to measure glucose in food
- **Advanced Bio Topics**
  - Microbiome, epigenetics, signal transduction, statistical analysis of epidemiology studies.
- **Culinary**
  - How to be critical consumers of diet and health information; cooking for people with t2d

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